<u>IN THE SPECIFICATION</u>:

Paragraph beginning at line 26 of page 4 has been amended as follows:

The solo configuration (Figures 1,2,3,4) of the invention relates to a rotary vane type machine comprising a compressor (10,19;46,48) and a turbine (36,43;57,59) housing, each having a crescent shape cavity. Each of these housing is receiving an eccentrically placed rotor (4,11,89,96,~~130,~~117) equipped by a radially movable single sliding vane (50,63) arranged in the rotor. The rotor receives a centrally placed pivot axle vane retention mechanism, which is comprised of a pin (139) and a pivot axle (150). The pin head fits into the vane centre socket. Both ends <u>or tips</u> (86,109) of the sliding vane (87,100,119,125) are extending radially outward and are in contact with the cycloidal inner surface of the housing peripheral (88,97) at all rotational angles. Within each housing, depending on the rotational position of the sliding vanes, forms a plurality of working chambers (49, 53, 60, 66, 72) each of the said chambers, delimited by the inner peripheral surface of the housing (48, 59), the outer peripheral surface of the rotor (90,98) and the side surface of the vane (16,37). With such configuration, the solo use of the turbo-rotary engine of the invention overcomes the

limitations of conventional internal combustion engines and enables significant improvement in power, torque and efficiency. The cycloidal housing inner peripheral eliminates any use of telescoping, articulated hinged vane mechanism and gives the engine of the invention a simple and naturally balanced configuration.

Paragraph beginning at line 30 of page 5 has been amended as follows:

The present invention is illustrated hereinafter through preferred and alternative embodiments wherein:

Figure 1, is a schematic isometric view of a rotary engine where compressor (10) and turbine (43) housings are arranged in tandem. The gas transfer from the compressor to the turbine is sequenced by a rotor synchronised ~~(24, 25, 26, 27, 8, 7, 6)~~ cyclo-valve. Combustion occurs within the turbine expansion chamber.

Paragraph beginning at line 4 of page 7 has been amended as follows:

Figure 1 and Figure 2 depict a preferred embodiment of the internal combustion rotary engine where combustion occurs within the turbine chamber (66). Figure 3 depicts a different preferred embodiment of an external combustion (74, 92) rotary engine where combustion starts in a chamber (72) prior to entry within the turbine expansion chamber (103). The rotary combustion engine casing (~~14,~~ 21, 35,44) comprises at least one rotary compressor unit wherein, said unit has inner (19,48) and outer (46) housings. The engine casing also comprises at least one rotary turbine unit wherein, said unit has inner (59) and outer (57) housings. Said housings are surrounded by a liquid cooled jacket (18,41,45). For example, water may be used as coolant. The housings have each, a circularly cylindrical (3, 13) rotor (12,128), rotatably and eccentrically mounted. The said rotary engine breathes through the intake (20) and exhaust (34,116) ports. The compressor rotor outer boundary (83,126) and turbine rotor outer boundary (98) are sealingly (~~86,~~101) mounted (90, 95) tangent to the chamber inner peripherals (88, 97). Accordingly, the respective rotor outer boundary and the chamber inner peripheral are osculating at their common tangency plane (90, 95). As shown in more detail in Figure 5, each of the said rotors (135) have an internal vane groove (1) and many seal slots (118, 129, 134, 136) and oil cooling holes (2, 130, 133).

Paragraph beginning at line 23 of page 9 has been amended as follows:

Two firing cycles occur per rotor revolution. As one firing takes place <u>in the chamber</u> (91), new cycles <u>in the chambers</u> (92, 107, 108) are preceding the present firing and at least one old cycle (60,99) is terminating thereof, a smooth operation is assured. The rotary turbine unit is similar to the compressor unit but its size differs. Working chambers (60, 66, 103, 99), belonging to the turbine are delimited by the housing inner peripheral (97), the rotor outer surface (98) and the side surface of the sliding vane (37). For Figure 3, the combustion working chamber (74) and the expansion chamber (103) are separate but linked. Thus, the turbine housing is allowed to run at a reduced temperature. A periodic sequence of expanded fluid is delivered from the exhaust port (34) with each rotation of the turbine rotor in response to high pressure and temperature gas expansion in the said turbine. The exhaust gas pressure is lowered to about local ambient pressure values to allow maximum shaft work extraction and increase in thermal efficiency. As shown in Figure 7, the maximum volume of the turbine expansion chamber (66) is sized such that the combusted gas pressure (151e, 151f, 151g) is expanded to local ambient pressure (151h). The height of the turbine inner

housing (36) and the turbine rotor (117) is sized in such a way that, the pressure of the gas, as it is being transferred from the compressor chamber (72) is maintained to about a constant high value (151 b). The turbine casing (35) is sealed at its opposite ends by bolted (42) plates (43). One of the said plates is apertured at its centerline, to accommodate the drive shaft (31) protruding therefrom.